



IPC using D-Bus on LiMo Foundation Platform Release 1

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Contents

1	IPC using D-Bus	1
1.1	References	1
1.2	Overview	1
1.3	Industry Standard	1
1.4	External API Documents	1
1.5	Plug-in Extension Point Interface	2
1.6	Other Interfaces	2
1.7	Other Notes	2
2	File Index	3
2.1	File List	3
3	File Documentation	5
3.1	ComponentOverview.h File Reference	5

Chapter 1

IPC using D-Bus

1.1 References

[1] *Software Architecture Document*, Version 1.1 Revision 1.4, LiMo Foundation, 11 September 2007

1.2 Overview

LiMo Foundation Platform Release 1 uses D-Bus from freedesktop.org for interprocess communication (IPC). Architecturally, D-Bus has the following layers:

- A library, `libdbus`, that allows two applications to connect to each other and exchange messages.
- A message bus daemon executable, built on `libdbus`, that multiple applications can connect to. The daemon can route messages from one application to zero or more other applications.
- Wrapper libraries or bindings based on particular application frameworks. For example, `libdbus-glib` and `libdbus-qt`. There are also bindings to languages such as Python. These wrapper libraries are the API most people should use, as they simplify the details of D-Bus programming. `libdbus` is intended to be a low-level backend for the higher level bindings. Much of the `libdbus` API is only useful for binding implementation.

1.3 Industry Standard

D-Bus 1.0.2

<http://www.freedesktop.org/wiki/Software/dbus#head-ed92e8f84ae0374ae3a2e3f714c2eb0037>

1.4 External API Documents

<http://dbus.freedesktop.org/doc/dbus-tutorial.html>

1.5 Plug-in Extension Point Interface

None

1.6 Other Interfaces

None

1.7 Other Notes

The URL provided in [Industry Standard](#) links to D-Bus 1.0.2 documentation and downloadable source code. Documentation for the most recent version of D-Bus may be found at <http://dbus.freedesktop.org/doc/api/html/index.html>

To generate Doxygen documentation for D-Bus version 1.0.2:

- Download D-Bus 1.0.2 source code.
- Download and Install Doxygen : See http://www.stack.nl/~dimitri/doxygen/install.html#install_bin_windows
- Run doxygen to generate the HTML files : See <http://os.cqu.edu.au/usr/share/doc/doxygen-1.4.7/>

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

ComponentOverview.h (Component Programming Interface Overview Header Template for Doxygen)	5
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Chapter 3

File Documentation

3.1 ComponentOverview.h File Reference

3.1.1 Detailed Description

Component Programming Interface Overview Header Template for Doxygen.

This file contains configuration information for documentation generation; it does not contain any API-specific information.

Index

ComponentOverview.h, [5](#)